## For Research Use Only

## Alpha-1-Antitrypsin Monoclonal antibody, PBS Only

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Catalog Number:66135-1-PBS **Featured Product** 

**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** 

66135-1-PBS

GeneID (NCBI):

Protein A purification

Size:

BC015642

CloneNo.:

1A9G6

100ug, Concentration: 1mg/ml by Nanodrop;

5265

**UNIPROT ID:** 

P01009

Source Mouse Isotype

Full Name:

serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin),

lgG1 Immunogen Catalog Number: AG9516

member 1

Calculated MW:

418 aa. 47 kDa

Observed MW:

51 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Species Specificity:

human, mouse, rat, pig

## **Background Information**

SERPINA1 is the gene for a protein called alpha-1-antitrypsin (AAT), which is a serine protease inhibitor whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. AAT is a glycoprotein synthesized primarily by hepatocytes, with smaller amountssynthesized by intestinal epithelial cells, neutrophils, pulmonary alveolar cells and macrophages. AAT is the most abundant, endogenous serine protease inhibitor in blood circulation and it has been implicated in regulating vital fluid phase biological events such as  $blood\ coagulation,\ fibrinolysis,\ complement\ activation,\ apoptosis,\ reproduction,\ tumor\ progression\ and$ inflammatory response. The primary function of AAT is thought to be the inactivation of neutrophil elastase and other endogenous serine proteases. Defects in SERPINA1 can cause emphysema or liver disease.

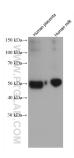
Storage

Store at -80°C.

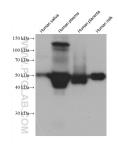
Storage Buffer:

PBS Only

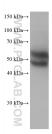
## Selected Validation Data



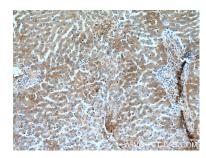
Various lysates were subjected to SDS PAGE followed by western blot with 66135-1-lg (Alpha 1 Antitrypsin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



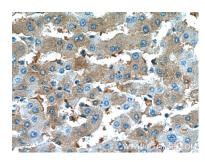
Various lysates were subjected to SDS PAGE followed by western blot with 66135-1-lg (Alpha 1 Antitrypsin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



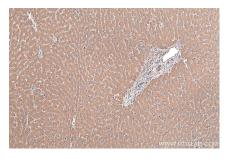
HepG2 cells were subjected to SDS PAGE followed by western blot with 66135-1-lg (Alpha 1 Antitrypsin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



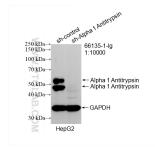
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 66135-1- Ig (Alpha-1-Antitrypsin Antibody) at dilution of 1:1000 (under 10x lens). This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



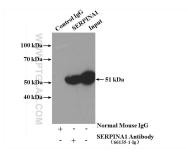
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 66135-1- Ig (Alpha-1-Antitrypsin Antibody) at dilution of 1:1000 (under 40x lens). This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



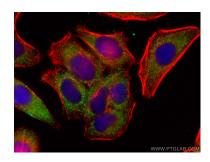
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 66135-1-Ig (Alpha 1 Antitrypsin antibody) at dilution of 1.64000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



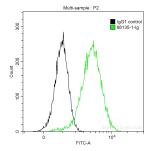
WB result of Alpha 1 Antitrypsin antibody (66135-1-lg; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Alpha 1 Antitrypsin transfected HepG2 cells. This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



IP result of anti-Alpha 1 Antitrypsin (IP:66135-1-Ig, 5ug; Detection:66135-1-Ig 1:1000) with human plasma lysate 4000ug. This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Alpha 1 Antitrypsin antibody (66135-1-lg, Clone: 1A9G6) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red). This data was developed using the same antibody clone with 66135-1-PBS in a different storage buffer formulation.



1X10^6 HepG2 cells were intracellularly stained with 0.2 ug Anti-Human Alpha 1 Antitrypsin (66135-1-lg, Clone:1A9G6) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Mouse IgG1 Isotype Control (66360-1-lg, Clone: T1F8D3F10) (black). Cells were fixed with 4% PFA and permeabilized with 0.1% TritonX-100. This data was developed using the same antibody clone with 66135-1-PBS in a



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